

REMARKS

This is in response to the Office Action mailed October 14, 2008, in which the Examiner rejected claims 277, 279-286, 288-301 and 317. Applicant has amended claims 277, 279, 285, 288, canceled claim 317, and added new claims 318-353. Entry of the amendments and reconsideration of the application, as amended, is respectfully requested.

Claim Amendments

Independent claim 277 has been amended to generally include the subject matter of previously presented claim 317, which has been canceled. Claim 277 describes the hollow tube as being “crimped to the lead wire so as to be mechanically and electrically coupled thereto. Minor amendments have been made to claims 279, 285 and 288.

Independent claim 318 has been added and is directed to a method of manufacturing the medical apparatus of claim 277 as previously presented. It should be understood that the step of “forming a mechanical and electrical connection directly between a first end of the hollow tube and the lead wire without solder” is intended to describe that at least one mechanical and electrical connection is formed between the hollow tube and the lead wire without the use of solder. Accordingly, this step reads on the formation of a mechanical and electrical connection between the hollow tube and the lead wire without solder even where additional mechanical and/or electrical connections between the hollow tube and the lead wire, including such connections using solder. Dependent claims 319-335 generally include subject matter previously presented in the claims depending from claim 277. As discussed below, none of the cited references, either alone or in combination, disclose all of the features of claim 318.

Independent claim 336 is directed to a medical apparatus having a similar scope to claim 277 as previously presented, except for the “mechanical and electrical connection directly between the hollow tube and the lead wire that is formed without solder”. As discussed above with regard to claim 318, element reads on the formation of a mechanical and electrical connection between the hollow tube and the lead wire without solder even where additional

mechanical and/or electrical connections between the hollow tube and the lead wire exist, including such connections using solder. Dependent claims 337-353 generally include subject matter previously presented in the claims depending from claim 277. As discussed below, none of the cited references, either alone or in combination, disclose all of the features of claim 336.

Claim Rejections – 35 U.S.C. §102

In the Office Action, the Examiner rejected claims 277, 279, 288, 291-301 and 317 (canceled) under 35 U.S.C. §102(b) as anticipated by Dickenson or, in the alternative, under 35 U.S.C. §103(a) as being obvious over Dickenson in view of Silvian et al. (U.S. Patent No. 6,522,920 B2). Applicant believes that the rejections can be withdrawn for the reasons set forth below.

As mentioned above, independent claim 277 has been amended to generally include the subject matter of previously presented claim 317 (now canceled). In rejecting claim 317, the Examiner found Dickenson to disclose “wherein the hollow tube is crimped to the lead wire 8, as as [*sic.*] to be mechanically coupled thereto (see the junction between tube 6 and lead wire 8 in figs. 1 and 2), wherein a portion of the lead wire 8 is disposed within the hollow tube 6 (see the junction between tube 6 and lead wire 8 in fig. 2), wherein the hollow tube 6 is crimped to the portion of the lead wire 8 (see the junction between tube 6 and lead wire 8 in fig. 2)”

However, Dickenson does not disclose that the tube 6 is crimped to the connections 8. Rather, Dickenson only describes the connections 8 as being soldered into the tubes 6 (col. 2, lines 29-39). While the figures of Dickenson may illustrate a connection between the tube 6 and the connections 8, they do not illustrate a mechanical and electrical connection that is formed without solder, as described in new claims 318 and 336, or “a hollow tube . . . crimped to the lead wire so as to be mechanically and electrically coupled thereto”, as provided in claim 277. Silvian et al. also fail to disclose the mechanical and electrical connection of claims 318 and 336 or the crimped connection between the hollow tube and the lead wire of claim 277.

Additionally, Applicant disagrees with the Examiner’s finding that the hollow tube 6 of Dickenson “is soldered directly to the circuitry 2”. Rather, Dickenson only discloses that “short lengths of copper tube 6 are brazed to the copper layer 2” (col. 2, lines 22-28; Applicant’s

emphasis). Silvian et al. also fail to disclose the soldering of an electrically-conductive hollow tube directly to implantable circuitry as provided in claim 277.

For at least these reasons, independent claim 277 is neither anticipated by Dickenson nor rendered obvious in view of Dickenson in view of Silvian et al. Therefore, Applicant requests that the rejection be withdrawn.

Additionally, claims 279, 288 and 291-301 are believed to be allowable in view of the cited references at least for the reasons set forth above with regard to claim 277, from which they depend. Additional grounds for withdrawing the rejections of some of the dependent claims are provided below.

With regard to claims 293-296 and 298-301, Applicant submits that a *prima facie* case of obviousness has not been established against the claims. In particular, each of the claims includes elements that are not taught by the cited references. For instance, neither Dickenson nor Itoigawa disclose “wherein the sensor comprises a chemical sensor” (claim 293), “an electrode, adapted to sense electrical activity in tissue of the patient” (claim 294), “a temperature sensor” (claim 295), “a flow sensor, adapted to sense a flow of blood in a vicinity of the apparatus” (claim 296), “a stimulating electrode” (claim 298), “a light source adapted to facilitate photodynamic therapy” (claim 299), “an electroactive polymer” (claim 300) or “a mechanical actuator” (claim 301). Accordingly, each of the claims is non-obvious in view of the cited references at least because they fail to disclose all of the elements of the claims.

Independent claims 318 and 336, along with their dependent claims, are also believed to be allowable in view of the cited references for the reasons set forth above.

Claim Rejections – 35 U.S.C. §103

In the Office Action, the Examiner rejected claims 280-285 and 290 under 35 U.S.C. §103(a) as being unpatentable over Dickenson in view of Silvian, and further in view of Skubitz et al. (U.S. Patent No. 5,851,226 A). Applicant believes that the rejections can be withdrawn for the reasons set forth above with regard to independent claim 277, from which the rejected claims depend.

In Section 11 of the Office Action, the Examiner rejected claim 286 under 35 U.S.C. §103(a) as being unpatentable over Dickenson in view of Silvian, and further in view of Delfino et al. (U.S. Patent No. 6,129,658 A). Applicant believes that the rejections can be withdrawn for the reasons set forth above with regard to independent claim 277, from which the rejected claims depend.

Conclusion

In view of the above comments and remarks, Applicant respectfully believes that the present application is in condition for allowance. Reconsideration and favorable action is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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